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09/987,246	11/14/2001	Yoshihiro Miyamoto	Q67253	6833

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER	
SHIBRU, HELEN	
ART UNIT	PAPER NUMBER
2621	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/987,246	MIYAMOTO, YOSHIHIRO	
	Examiner	Art Unit	
	HELEN SHIBRU	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. The amendments, filed 01/10/2007, have been entered and made of record. Claims 1-10 are pending.

Response to Arguments

2. Applicant's arguments filed 04/18/2007 have been fully considered but they are not persuasive.

Applicant states "Sakamoto fails to disclose selection means which makes a selection of data for each picture frame, on a frame-by-frame basis, and the selection of data is made on a frame-by-frame basis not 'whenever a playback request' is made."

In response the Examiner respectfully disagrees. The playbacks are normal and fast playback, i.e. normal playback or fast playback is selected. In the present application the selector 105 is a switch (see paragraph 0057 in the PG PUB). The selector switches the re-encoded data to the encoded data and vise versa (see also abstract in the present application). Sakamoto also teaches coded video data reproduction are switched between two types of coded data, i.e. if normal playback is requested (selected) while fast playback was reproducing, the device switches from fast forward to normal. The normal playback coded video data are obtained by encoding the original video frame using both the intra-frame coding and inter-frame coding (referring to each picture frame, frame-by-frame) (see figs. 5 and 6, where it shows each pictures are encoded at the first encoder by the first video coding scheme, and col. 8 lines 1-42). Sakamoto further discloses the normal playback coded video data that are encoded using both intra-frame and inter-frame are produced (see claim 21). Therefore Sakamoto discloses selecting

for making a selection of data for each picture frame, frame-by-frame. Applicant attention is also directed to the present application paragraph 0040 where it discloses

Applicant states "Sakamoto does not disclose replacing a portion of the encoded data with the re-encoded data."

In response the Examiner respectfully disagrees. Sakamoto discloses the coded data contained in the fast playback coded video data are more compressed compared with the corresponding normal coded data (see col. 8). Sakamoto further discloses only intra-frame coding is used to obtain the fast playback coded video data, i.e. a portion of the encoded data is replaced by the re-encoded data.

The claimed invention does in fact read on the cited references for at least the reasons discussed above and as stated in the detail Office Action as follows.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto (US Pat. No. 5,887,110).

Regarding claim 1, Sakamoto discloses an encoded moving picture data conversion device for converting encoded moving picture data compression-encoded by using inter-frame prediction, and for outputting converted data as encoded output data

capable of being subjected to special reproducing (see abstract, col. 6 lines 62-67 and claim 1), the device comprising:

first storage means for storing said inputted encoded moving picture data (see col. 7 lines 35-52 and claim 21 (1 and 3) and claim 24));

decoding means for decoding said inputted encoded moving picture 10 data to decoded data (see col. 7 lines 1-8 and claim 1 (b));

re-encoding means for re-encoding said decoded data of a picture frame in a moving picture sequence, in an intra-frame encoding mode in order to generate intra-frame re-encoded data (see col. 7 lines 8-20 and claim 14);

second storage means for storing re-encoded data, said re-encoded data including said intra-frame re-encoded data (see col. 7 lines 35-52 and claim 21 (2 and 30 and claim 24); and

selection means for making a selection of data for each picture frame, frame-by-frame, the data being selected from said encoded moving picture data stored in said first storage means and said re-encoded data stored in said second storage means, and for outputting the selected data as said encoded output data capable of being subjected to said special reproducing (see col. 8 lines 30-42 and claim 7. See also fig. 5 which shows that each frames are encoded for the Normal playback mode and each frames are re-encoded using only the intra-frame coding scheme in order to generate intra-frame re-encoded data for the fast playback mode. During reproduction, coded video data are switched between the first storage means and the second storage means. The first storage means stores each entered video frames and the second storage means stores each intra-frame. See also figures 5-6, col. 7 lines 21-col. 9 line13 and the previous Office Actions).

Regarding claim 2, Sakamoto discloses re-encoding means comprises:

means for re-encoding said decoded data of picture frames as many as J following after the picture frame re-encoded in the intra-frame encoding mode, by using inter-frame prediction in order to generate inter-frame re-encoded data, where J is an integer greater than zero (see col. 7 lines 21-34, fig. 7 and 8, and claim 1);

means for measuring a picture quality of re-encoded picture frames, said re-encoded picture frames including the intra-frame re-encoded picture frame and one or more inter-frame re-encoded picture frames (see col. 8 lines 10-26 and col. 11 line 56-col. 12 line 3); and

means for controlling a value of said J in accordance with said picture quality (see col. 8 lines 43-56), and

wherein said selection means comprises means for, if selecting said intra-frame re-encoded data, also selecting said inter-frame re-encoded data of the picture frames as many as J following after said intra-frame re-encoded data (see col. 8 lines 1-9 and 31-42, and col. 10 lines 49-57).

Regarding claim 3, Sakamoto discloses re-encoding means comprises.

means for skipping picture frames as many as (K-1) after the intra-frame re-encoded picture frame, where K is an integer greater than one (see col. 7 lines 21-34, and col. 11 line 56-col. 12 line 3);

means for re-encoding said decoded data of a picture frame after K frames from said intra-frame re-encoded picture frame, by using inter-frame prediction with reference to said intra-frame re-encoded picture frame in order to generate inter-frame re-encoded data (see col. 8 lines 43-63);

means for calculating the number of frames constituted of said input encoded moving picture data corresponding to said intra-frame re-encoded data in code amount (see col. 8 lines 1-26); and

means for controlling a value of said K in accordance with the number of frames calculated (see col. 8 lines 27-42), and

wherein said selection means comprises means for, if selecting said intra-frame re-encoded data, skipping the frames as many as (K-1) following after said intra-frame re-encoded picture frame, and for selecting said inter-frame re-encoded data after the K frames from said intra-frame re-encoded picture frame (see col. 10 lines 8-28).

Regarding claim 4, Sakamoto discloses re-encoding means comprises means for re-encoding said decoded data of frames at L-frame intervals in an intra-frame encoding mode generate intra-frame re-encoded data, in such a way that re-encoded data in each frame occupy at least a part of the frame and re-encoded data gathered from frames as many as M cover an entire frame area, where L is an integer greater than one and M is an integer greater than one (see col. 12 lines 4-34), and

wherein said selection means comprises means for selecting only said intra-frame re-encoded data in response to a high-speed reproducing request, and for outputting said selected re-encoded data as said encoded data capable of being subjected to said special reproducing (see col. 12 line 59-col. 13 line 9).

Method claims 5-8 are rejected for the same reason as discussed in claims 1-4 above.

Regarding claim 9, Sakamoto discloses an encoded moving picture data conversion apparatus for converting encoded moving picture data compressed encoded by using inter-frame prediction to converted data, the apparatus comprising (see rejection of claim 1):

decoding means for decoding said inputted encoded moving picture data to obtain decoded data (see rejection of claim 1);

re-encoding means for re-encoding said decoded data at an intra-frame encoding mode in order to generate intra-frame re-encoded data (see rejection of claim 1);

replacing means for replacing a portion of said inputted encoded moving picture data by said re-encoded data, for outputting the replaced data as said converted data (see claims 1 (c) and claim 4, the inputted data is re-encoded to obtain fast playback coded video data satisfying a fast playback bit rate).

Regarding claim 10, the limitation of claim 10 can be found in claim 9. Therefore claim 10 is analyzed and rejected for the same reason as discussed in claim 9 above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Helen Shibru
June 27, 2007